

REMARKS

The Office Action dated April 20, 2006, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

By this Amendment, claims 22 and 23 have been added and claims 1, 2, 4, 6, 7, 11 and 13 have been amended. The amendments to the claims do not narrow the scope of the claims. Support for new claim 22 can be found in at least Figures 1 and 2 of the application as originally filed. Support for new claim 23 can be found in at least application publication paragraphs [0021] to [0023] and [0040] of the application as originally filed. Claim 1-23 are pending and respectfully submitted for consideration.

Allowable Subject Matter

The Applicants wish to thank the Examiner for indicating allowable subject matter in claims 20 and 21. Claims 20 and 21 were not rewritten in independent form as they depend from claim 17 which is allowable for the reasons submitted below.

Information Disclosure Statement

The Information Disclosure Statements (IDSs) filed July 8, 2004 and February 8, 2005, were objected to as failing to comply with 37 C.F.R. § 1.98(a)(3) because they did not include a concise explanation of the relevance of the non-English language publications. The Applicants submit herewith a new IDS with English language versions and concise explanations of the relevance of the publications printed in the German language.

Rejections Under 35 U.S.C. § 102

Claims 1, 8, 9 and 15 were rejected under 35 U.S.C. § 102(a) as being anticipated by Beghello et al. (U.S. Patent Publication No. 2002/0114931 A1, "Beghello"). Claims 8, 9 and 15 depend from claim 1. The Applicants traverse the rejection and respectfully submit that Beghello fails to disclose or suggest the claimed features of the invention.

Beghello discloses a polymer circuit having polymer strands that emanate from contact points A, B, C, D, E, F, G and H, located at the periphery of substrate 11. The strands can also contain discontinuities, as indicated schematically for strand 12 emanating from contact points A and H, but being interrupted in the middle. The discontinuity can be in the form of a physical discontinuity meaning that the conductive material stops, leaving a gap between the ends of the strands. See paragraph [0023]. Paragraph [0027] discloses that at least one of the contact points in a singular, binary or multiple polymer device consists of a thermocouple which, when subject to the body warmth of a user holding the thermocouple/contact point between the tips of his/her fingers, emits an electric current, which in turn triggers a response from the polymer circuit.

Claim 1 recites that the circuit is provided with a break adapted to be closed by a conducting element. In making the rejection, the Office Action took the position that paragraphs [0023] and [0027] of Beghello disclose the features of a break adapted to be closed by a conductive element. The Applicants respectfully submit, however, that the discontinuity in the strand 12 is not closed, but left open as a security measure and that

the body warmth of the user holding the thermocouple/ contact point triggers a response from the polymer circuit.

In view of the above, BeghELLO fails to disclose or suggest the features of the invention as recited in claim 1. BeghELLO merely discloses a contact point comprising a thermocouple that reacts to body warmth which triggers a response from the polymer circuit. As such, BeghELLO does not disclose or suggest a break adapted to be closed, as suggested in the Office Action.

According to U.S. patent practice, a reference must teach every element of a claim in order to properly anticipate the claim under 35 U.S.C. §102. In addition, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628,631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “Every element of the claimed invention must be arranged as in the claim [t]he identical invention must be shown in as complete detail as is contained in the patent claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added). The Applicants respectfully submit that BeghELLO does not disclose or suggest a circuit provided with a break adapted to be closed by a conducting element, as recited in claim 1. Accordingly, BeghELLO does not anticipate claim 1, nor is claim 1, obvious in view of BeghELLO. As such, the Applicants submit that claim 1 is allowable over the cited art.

Claims 8, 9 and 15 depend from claim 1 and are allowable for at least the same reason.

Rejections Under 35 U.S.C. § 103

Claims 2-7, 10-14 and 17-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beghello in view of Johnson (U.S. Patent No. 5,597,183). With respect to independent claim 17, Beghello was cited for disclosing many of the claimed elements of the invention with the exception of providing a substrate and printing a circuit onto the substrate, the circuit having a break and the break being closable by a conducting element. Beghello was also cited for disclosing many of the claimed elements of the invention with the exception of the features recited in dependent claims 2-5, 7, 11, 13, 14, 16 and 19. Johnson was cited for curing these deficiencies.

Johnson discloses a printable layer as the inner components of membrane switches 14. Figs. 2 and 3 illustrate the design of membrane switch 14, without connecting circuitry. The membrane switch includes a top pair of parallel spiral conductive ink traces 52 on a first surface, such as the underside of layer 100 or the inner surface of printable layer 10, and a bottom pair of parallel spiral conductive ink traces 54 on a second surface, such as the top surface of layer 106, as in Fig. 2 or base substrate 98, as in Fig. 3. The two sets of spirals are positioned to face each other, but are spaced apart with a spacer layer of predetermined thickness. The spacer layer contains apertures which are aligned with the top and bottom sets of spirals 52 and 54, respectively. Printable layer 10 is printed with activation region 46 of the membrane switches 14 indicating where the user should depress the switch. When the activation region of a switch is depressed, top spiral set 52 comes into contact with bottom spiral

set 54 through aperture 50, thus activating the switch and closing a circuit. See page 5, lines 9-27 of Johnson.

With respect to claims 2-7, 10-14 and 17-19, the Office Action identified the claim elements that BeghELLO fails to disclose, and the claim elements that Johnson discloses. However, the Office Action did not set forth a motivation for combining BeghELLO and Johnson.

Under U.S. patent practice, there must be a suggestion or motivation to modify the references. Specifically, there are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teaching of the prior art, and the knowledge of persons of ordinary skill in the art. See In re Rouffet, 149 F3d. 1350, 1357, 47 U.S.P.Q. 2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references tell every element of the claimed invention, however, without a motivation to combine, the rejection based on a *prima facie* case of obviousness was held improper). Further, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." See In re Mills, 916 F2d 680, 682, 16 U.S.P.Q. 2d, 1430, 1432 (Fed. Cir. 1990). See M.P.E.P. 2143.01.

In this case, as the Office Action has merely given a bare listing of elements disclosed in BeghELLO and elements disclosed in Johnson, there is no proper obviousness rejection made of claims 2-7, 10-14 and 17-19.

Accordingly, the Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to combine BeghELLO and Johnson.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure.

In view of the above, the Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness for purposes of a rejection of claims 2-7, 10-14 and 17-19 under 35 U.S.C. §103.

Conclusion

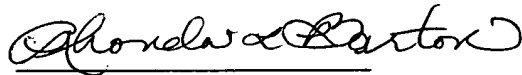
The Applicants respectfully submit that claims 1 and 17 are allowable. Claims 2-16, 22 and 23 depend from claim 1 and claims 18 and 19 depend from claim 17. The

Applicants further submit that each of these claims incorporate the patentable aspects thereof, and are therefore allowable for at least the same reasons as discussed above. Accordingly, the Applicants respectfully request withdrawal of the rejections, allowance of claims 1-23 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 028605-00001.**

Respectfully submitted,



Rhonda L. Barton
Attorney for Applicants
Registration No. 47,271

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

RLB/wbp

Enclosures: Information Disclosure Statement; SB/08a and SB/08b with 11 References